



United States Air Force

Scientific Advisory Board

Dr. Thomas A. Cruse

Private Consultant



EDUCATION:

University of Washington,
Ph.D., Engineering Mechanics, 1967
Stanford University,
M.S., Engineering Mechanics, 1964
B.S., Mechanical Engineering, 1963

WORK EXPERIENCE:

Private Consultant, 1999-Present.
Vanderbilt University, Nashville, TN
Associate Dean for Research and Graduate Affairs, 1997-1999.
H. Fort Flowers Professor of Mechanical Engineering, Emeritus (Present); 1990-1999.
Southwest Research Institute, San Antonio, TX
Program Director-Reliability, 1989-1999.
Director, Engineering Mechanics Department, 1983-1989.
Pratt & Whitney Aircraft, East Hartford, CT
Engineering, 1973-1983.
Carnegie Mellon University, Pittsburgh, PA, 1967-1973.
Associate Professor of Mechanical Engineering, 1972-1973.

AREAS OF EXPERTISE:

Structural reliability, fatigue and fracture mechanics, fracture of advanced composites, durability and life prediction in advance disk alloys and ceramic thermal barriers coatings, probabilistic risk assessment, variability-based engineering and design, computational fracture mechanics, boundary element methods.

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS:

Fellow, American Institute of Aeronautics and Astronautics, American Society of Mechanical Engineers, American Academy of Mechanics, and the US Association for Computational Mechanics; Past Member, USACM Executive Council, Past Chairman, Applied Mechanics Division of the ASME; Past President and Founder, International Association for Boundary Element Methods. Tau Beta Pi, Pi Tau Sigma, Omicron Delta Kappa.
